

## SEQUENCE LISTING

<110> Alnylam Pharmaceuticals Inc.

<120> siRNA CONJUGATES

<130> 14174-070W01

<150> US 60/465,665

<151> 2003-04-25

<150> US 60/463,772

<151> 2003-04-17

<150> US 60/469,612

<151> 2003-05-09

<150> US 60/465,802

<151> 2003-04-25

<150> US 60/493,986

<151> 2003-08-08

<150> US 60/494,597

<151> 2003-08-11

<150> US 60/506,341

<151> 2003-9-26

<150> US 60/510,246

<151> 2003-10-9

<150> US 60/510,318

<151> 2003-10-10

<150> US 60/518,453

<151> 2003-11-07

<150> PCT/US04/07070

<151> 2004-03-08

<160> 28

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<210> 1

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<212> PRT

<213> Artificial Sequence

<220>

<223> Exemplary Cell Permeation Peptide

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Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg Arg Met Lys Trp Lys Lys  
1 5 10 15

<210> 2

<211> 14  
<212> PRT  
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<220>  
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<400> 2  
Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Cys  
1 5 10

<210> 3  
<211> 27  
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<220>  
<223> Exemplary Cell Permeation Peptide

<400> 3  
Gly Ala Leu Phe Leu Gly Trp Leu Gly Ala Ala Gly Ser Thr Met Gly  
1 5 10 15  
Ala Trp Ser Gln Pro Lys Lys Lys Arg Lys Val  
20 25

<210> 4  
<211> 18  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exemplary Cell Permeation Peptide

<400> 4  
Leu Leu Ile Ile Leu Arg Arg Arg Ile Arg Lys Gln Ala His Ala His  
1 5 10 15  
Ser Lys

<210> 5  
<211> 26  
<212> PRT  
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<220>  
<223> Exemplary Cell Permeation Peptide

<400> 5  
Gly Trp Thr Leu Asn Ser Ala Gly Tyr Leu Leu Lys Ile Asn Leu Lys  
1 5 10 15  
Ala Leu Ala Ala Leu Ala Lys Lys Ile Leu  
20 25

<210> 6  
<211> 18  
<212> PRT  
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<220>  
<223> Amphiphilic model peptide

<400> 6  
Lys Leu Ala Leu Lys Leu Ala Leu Lys Ala Leu Lys Ala Ala Leu Lys  
1 5 10 15  
Leu Ala

<210> 7  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exemplary Cell Permeation Peptide

<400> 7  
Arg Arg Arg Arg Arg Arg Arg Arg  
1 5

<210> 8  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exemplary Cell Permeation Peptide

<400> 8  
Lys Phe Phe Lys Phe Phe Lys Phe Phe Lys  
1 5 10

<210> 9  
<211> 37  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Exemplary Cell Permeation Peptides

<400> 9  
Leu Leu Gly Asp Phe Phe Arg Lys Ser Lys Glu Lys Ile Gly Lys Glu  
1 5 10 15  
Phe Lys Arg Ile Val Gln Arg Ile Lys Asp Phe Leu Arg Asn Leu Val  
20 25 30  
Pro Arg Thr Glu Ser  
35

<210> 10  
<211> 31  
<212> PRT  
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<220>  
<223> Exemplary Cell Permeation Peptides

<400> 10  
Ser Trp Leu Ser Lys Thr Ala Lys Lys Leu Glu Asn Ser Ala Lys Lys  
1 5 10 15  
Arg Ile Ser Glu Gly Ile Ala Ile Ala Ile Gln Gly Gly Pro Arg  
20 25 30

<210> 11

<211> 30  
<212> PRT  
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<220>  
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<400> 11  
Ala Cys Tyr Cys Arg Ile Pro Ala Cys Ile Ala Gly Glu Arg Arg Tyr  
1 5 10 15  
Gly Thr Cys Ile Tyr Gln Gly Arg Leu Trp Ala Phe Cys Cys  
20 25 30

<210> 12  
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<220>  
<223> Exemplary Cell Permeation Peptides

<400> 12  
Asp His Tyr Asn Cys Val Ser Ser Gly Gly Gln Cys Leu Tyr Ser Ala  
1 5 10 15  
Cys Pro Ile Phe Thr Lys Ile Gln Gly Thr Cys Tyr Arg Gly Lys Ala  
20 25 30  
Lys Cys Cys Lys  
35

<210> 13  
<211> 12  
<212> PRT  
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<220>  
<223> Exemplary Cell Permeation Peptides

<400> 13  
Arg Lys Cys Arg Ile Val Val Ile Arg Val Cys Arg  
1 5 10

<210> 14  
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<212> PRT  
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<220>  
<223> Exemplary Cell Permeation Peptides

<400> 14  
Arg Arg Arg Pro Arg Pro Pro Tyr Leu Pro Arg Pro Arg Pro Pro Pro  
1 5 10 15  
Phe Phe Pro Pro Arg Leu Pro Pro Arg Ile Pro Pro Gly Phe Pro Pro  
20 25 30  
Arg Phe Pro Pro Arg Phe Pro Gly Lys Arg  
35 40

<210> 15  
<211> 13  
<212> PRT  
<213> Artificial Sequence

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&lt;223&gt; Exemplary Cell Permeation Peptides.

&lt;400&gt; 15

Ile Leu Pro Trp Lys Trp Pro Trp Trp Pro Trp Arg Arg  
1 5 10

&lt;210&gt; 16

&lt;211&gt; 16

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Synthetically generated peptide

&lt;400&gt; 16

Ala Ala Val Ala Leu Leu Pro Ala Val Leu Leu Ala Leu Leu Ala Pro  
1 5 10 15

&lt;210&gt; 17

&lt;211&gt; 11

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Synthetically generated peptide

&lt;400&gt; 17

Ala Ala Leu Leu Pro Val Leu Leu Ala Ala Pro  
1 5 10

&lt;210&gt; 18

&lt;211&gt; 13

&lt;212&gt; PRT

&lt;213&gt; Human immunodeficiency virus

&lt;400&gt; 18

Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln  
1 5 10

&lt;210&gt; 19

&lt;211&gt; 16

&lt;212&gt; PRT

&lt;213&gt; Drosophila Antennapedia

&lt;400&gt; 19

Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg Arg Met Lys Trp Lys Lys  
1 5 10 15

&lt;210&gt; 20

&lt;211&gt; 21

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; "Dual targeting" siRNAs

&lt;221&gt; misc\_feature

&lt;222&gt; 20, 21

&lt;223&gt; n = dT= deoxythymidine

<400> 20  
uaccaggcacc caggugcugn n 21

<210> 21  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> "Dual targeting" siRNAs

<221> misc\_feature  
<222> 20, 21  
<223> n = dT= deoxythymidine

<400> 21  
ccgggcaucc ggacgaguun n 21

<210> 22  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Dual targeting siRNA

<221> misc\_feature  
<222> 1, 2  
<223> n = dT= deoxythymidine

<400> 22  
nnaugguagu gggucgacga c 21

<210> 23  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> "Dual targeting" siRNAs

<221> misc\_feature  
<222> 1, 2  
<223> n = dT= deoxythymidine

<400> 23  
nngggcccguc gcccagcuca a 21

<210> 24  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Pseudocomplementary, bifunctional siRNA

<221> misc\_feature  
<222> 5  
<223> n = A\* = 2-aminoadenine

<221> misc\_feature  
<222> 20, 21  
<223> n = dT= deoxythymidine

<400> 24  
uaccngcacc caggugcugn n 21

<210> 25  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Pseudocomplementary, bifunctional siRNA

<221> misc\_feature  
<222> 16  
<223> n = A\* = 2-aminoadenine

<221> misc\_feature  
<222> 20, 21  
<223> n = dT= deoxythymidine

<400> 25  
ccgggcaucc ggacgnguun n 21

<210> 26  
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<220>  
<223> Pseudocomplementary, bifunctional siRNA

<221> misc\_feature  
<222> 1, 2  
<223> n = dT= deoxythymidine

<221> misc\_feature  
<222> 7  
<223> n = U\* = 2-thiouracil

<400> 26  
nnauggnagu gggucgacga c 21

<210> 27  
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<212> DNA  
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<220>  
<223> Pseudocomplementary, bifunctional siRNA

<221> misc\_feature  
<222> 1, 2  
<223> n = dT= deoxythymidine

<221> misc\_feature  
<222> 18  
<223> n = U\* 2-thiouracil

<400> 27  
nnggccccguc gcccagcnca a 21  
<210> 28  
<211> 23  
<212> DNA  
<213> Mus musculus  
  
<400> 28  
aagctggccc tggacatgga gat 23